

L5 ANSWER 39 OF 97 CA COPYRIGHT 2001 ACS  
AN 115:213720 CA  
TI Asbestos-free **calcium silicate** structural  
insulating elements  
IN Rovnanik, Eduard; Lejsek, Lubomir; Franc, Vladimir; Jusko, Frantisek;  
Hronsky, Jan  
PA Czech.  
SO Czech., 4 pp.  
CODEN: CZXXA9  
DT Patent  
LA Czech  
IC ICM C04B035-80  
ICA B28B001-52  
CC 58-4 (Cement, Concrete, and Related Building Materials)  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CS 266097	B1	19891114	CS 1988-1824	19880321

AB The elements, based on the thermal reaction of silicates and calcareous components and reinforced with dispersed fibers, comprise **lime** and/or hydrated **lime** 25-40, sand (sp. surface area  $\geq 350 \text{ m}^2/\text{kg}$ ;  $\leq 15\%$  having diam.  $>0.065 \text{ mm}$ ) 20-40, expanded perlite (bulk d.  $\leq 100 \text{ kg/m}^3$ ;  $\geq 50\%$  having diam.  $\leq 0.25 \text{ mm}$ ) 5-30,  
SiO<sub>2</sub> fume 2-10, and cellulose pulp 2-12 wt. parts. Optionally, the elements contain  $\leq 8 \text{ wt. parts}$  alkali-resistant inorg. fibers.  
ST **calcium silicate** building material; **lime**  
**calcium hydroxide** **calcium silicate**; sand  
**calcium silicate** building material; expanded perlite  
**calcium silicate**; vitreous silica fume  
**calcium silicate**; cellulose pulp **calcium**